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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,685	12/31/2003	Steven T. Adamy	55216	2168

7590 02/21/2006

Church & Dwight Co., Inc.
Law Department - Patents
469 N. Harrison Street
Princeton, NJ 08540

EXAMINER

REIS, TRAVIS M

ART UNIT	PAPER NUMBER
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2859

DATE MAILED: 02/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/749,685

Applicant(s)

ADAMY, STEVEN T.

Examiner

Travis M. Reis

Art Unit

2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/31/6 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20031231. 4-2-04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, diagrams showing the structure disclosed in the limitations of claims 1-8 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 3-5 are objected to because of the following informalities:

Claim 3 recites "The film-forming polymer", the preamble of dependent claims must refer to the parent preamble, i.e. "The timing device of claim 2".

Claim 4 recites "The film-forming polymer", the preamble of dependent claims must refer to the parent preamble, i.e. "The timing device of claim 2".

Claim 4 recites the limitation "the wet film" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites "The matrix", the preamble of dependent claims must refer to the parent preamble, i.e. "The timing device of claim 1".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3 & 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Adamy et al. (U.S. Patent 6269764).

Adamy et al. discloses a method and apparatus for determining when a consumer product has reached an end to its useful shelflife comprising preparing a timing device (10) comprising a redox indicator (col. 5 lines 15-16) within a cellulose derivative film-forming polymer (col. 4 lines 15-19) matrix exposed to air (col. 4 lines 15-19) which also contains a metal ion (col. 5 line 19) capable of oxidizing the redox indicator; attaching the timing device to an outside surface of the consumer product (col. 9 line 25); and observing the timing device for color changes (col. 14 lines 15-18), which color changes coincide with the end of the useful shelflife of the said consumer product (22) (Figure 7).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2859

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5 & 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adamy et al. in view of Anderson (U.S. Patent App. Pub. 20050078557)

With reference to claim 5, Adamy et al. do not disclose the matrix is attached to adhesive tape.

Anderson discloses a sensor (1) uses an adhesive tape to adhere to products (pg. 4 para. 0044 line 7). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the adhesive disclosed by Anderson to the indicator disclosed by Adamy et al. in order to be firmly attached to a product.

With reference to claim 6, Adamy et al. do not disclose the redox indicator is from the group of indigo carmine or methylene blue.

Anderson discloses the sensor uses indigo carmine dye (pg 2, para. 0029, lines 1-13) in order that the dye used is non-toxic. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to replace the dye disclosed by Adamy et al. with the indigo carmine disclosed by Anderson in order to have a non-toxic dye.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Adamy.

Adamy et al. do not disclose film-forming polymer has a thickness of from 5 to 50 mil. However, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a polymer having a thickness between 5 and 50 mil, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the "optimum range" involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was

Art Unit: 2859

made to make the polymer thickness disclosed by Adamy et al. between 5 and 50 mil in order that oxidation occurs at a optimum rate.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Adamy et al. & Anderson in view of Preziosi et al. (U.S. Patent 4788151).

Adamy et al. disclose all of the instant claimed invention as stated above in the rejection of claims 1-3 & 8, but do not disclose the metal ion is a tin ion.

Preziosi et al. discloses a metal-complexed acetylenic compound useful as an environmental history indicator which uses tin ions (col. 3 lines 20-31). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to replace the iron ions disclosed by Adamy et al. with tin ions disclosed by Preziosi et al. since it is particularly useful as a complexing agent and is more ionizable than iron (due to number of electrons).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Davis discloses a fruit ripeness telltale (U.S. Patent 3420635). Myers discloses a timer device (U.S. Patent 3520124). Kydonieus et al. discloses a time color indicator (U.S. Patent 4212153). Lilly et al. discloses an elapsed time indicator (U.S. Patent 4229813). McNeely discloses a time watch (U.S. Patent 4248597). Youngren discloses a shelf life indicator (U.S. Patent 4382700). Nichols discloses a color change indicator (U.S. Patent 4629330). Prusik et al. discloses a multifunctional time-temperature indicator (U.S. Patent 5057434). Ramsey et al. discloses a useful life indicator (U.S. Patent 5630372). Moore discloses a reducing invalid printed offers (U.S. Patent 5707680). Gics discloses an indicator (U.S. Patent 5997927). Qiu et al. discloses a time-temperature indicator (U.S. Patent 6244208). Yanagi et al. discloses a method of indicating time (U.S. Patent 5756356). Woodaman discloses a detection of

Art Unit: 2859

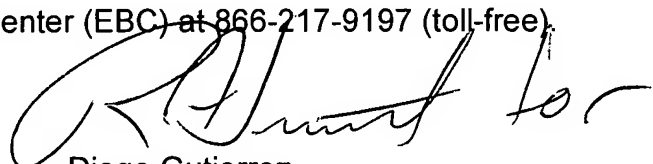
contaminants in food (U.S. Patent 6270724). Isbitsky et al. discloses a time indicator (U.S. Patent App. Pub. 20040240324). Patel discloses a moving boundary device (U.S. Patent 5045283). Harris et al. discloses a device use indicator (U.S. Patent 6314907). Ushiana et al. disclose a detecting body (JP 360093983 A). Nakazawa et al. discloses a volatile color composition (JP 401202660 A).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis M. Reis whose telephone number is (571) 272-2249. The examiner can normally be reached on 8--5 M--F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Travis M Reis
Examiner
Art Unit 2859



Diego Gutierrez
Supervisory Patent Examiner
Tech Center 2800

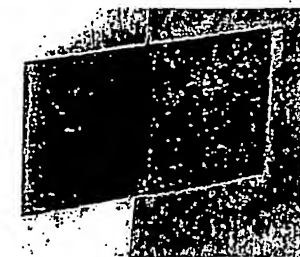
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February 6, 2006



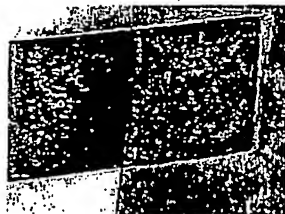
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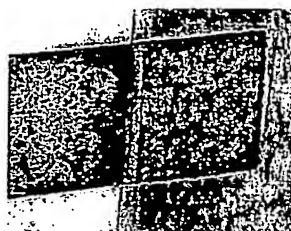
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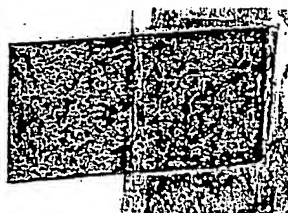
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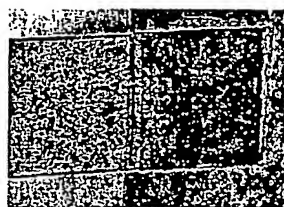
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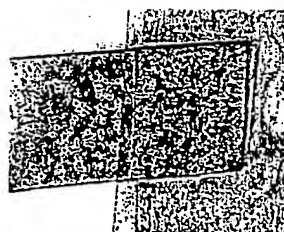
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30



19



6

Days->

Figure 1

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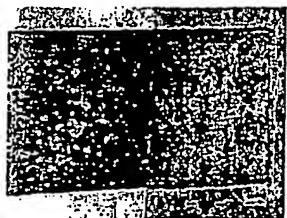
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Application No. 10/749,685

Replacement Sheet

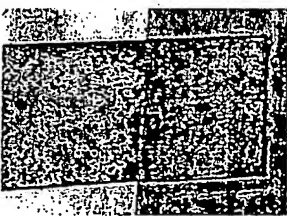
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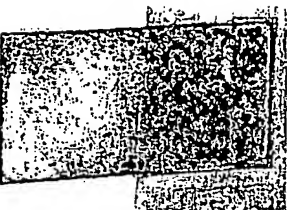
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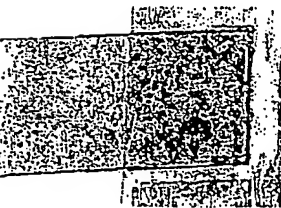
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42



36



6

Days->

Figure 2

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Mr. Approval
TMR 2/6/11



Application No. 10/749,685

Replacement Sheet

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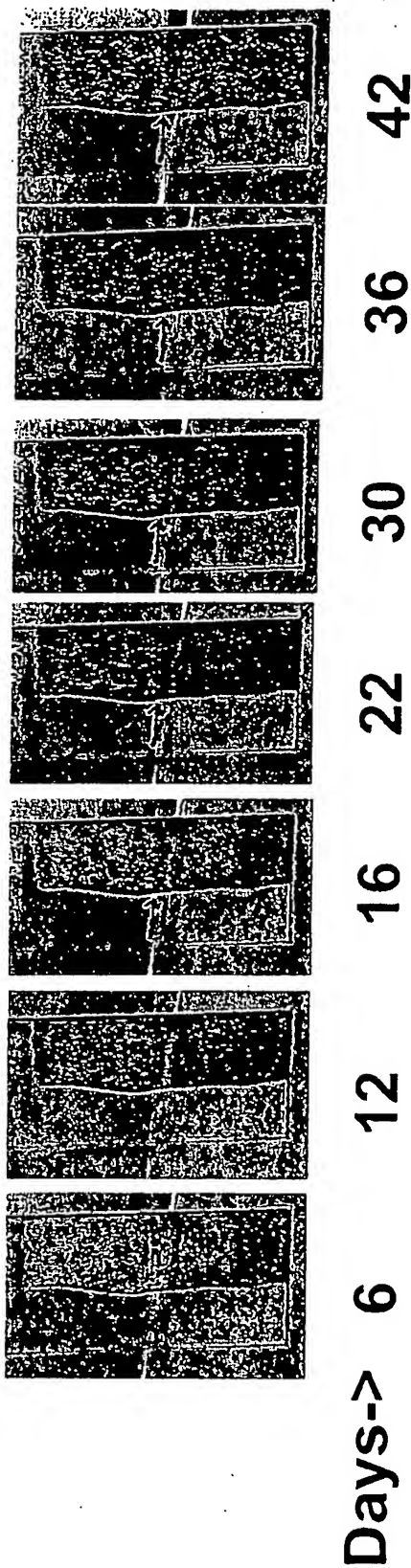


Figure 3

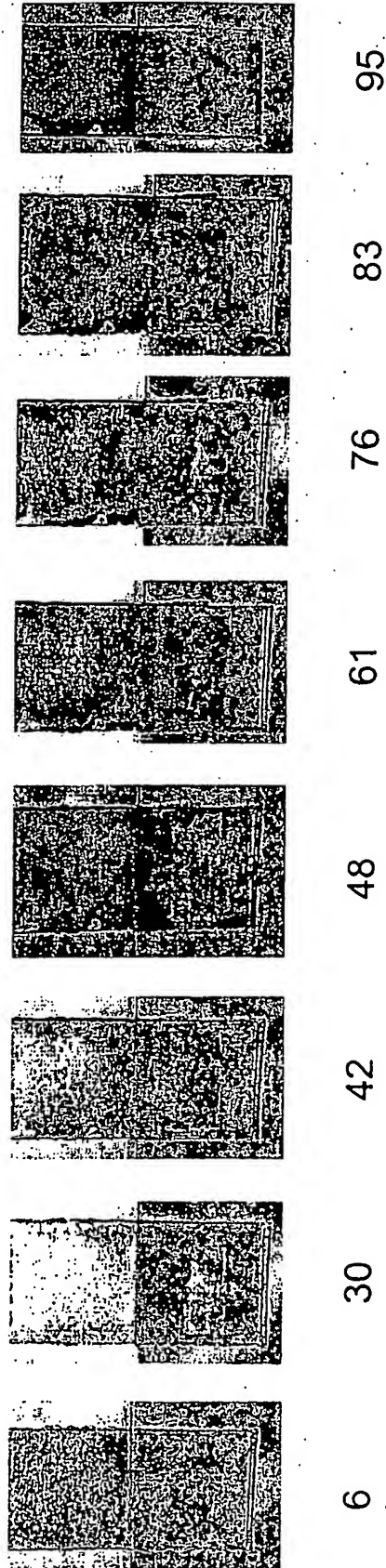
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Application No. 10/749,685

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Figure 4

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